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CHINA'S ELECTRIC POWER SECTOR

Issues and Background

China has the world's fastest growing electric power industry, adding 23 million kilowatts of generating capacity over the past two years. But economic growth is far outpacing energy expansion; although electricity supply grew by 8 percent last year, industrial output jumped by more than 20 percent. Indeed, Chinese media last year began admitting that electricity output falls short of demand by 20-30 percent annually. Official statements show that Beijing and local-level officials are planning to add 135 million kilowatts of generating capacity to China's existing 165 million kilowatts between 1993 and 2000 and are allocating $40-45 billion to the effort.

Most of the capacity increase over the next six years is planned to come from more than 20 large thermal power plants--coal-fired facilities already account for 70 percent of China's electricity production--and some 15 hydroelectric facilities. But Chinese officials recently unveiled long-term plans to have nuclear energy provide 5 percent of electric power by the year 2020; prior to last year's startup of China's first nuclear facility at Daya Bay, nuclear accounted for less than 0.5 percent of the country's electricity supply. A growing number of Chinese provinces--anxious to reduce their dependence on unreliable shipments of coal from northern provinces--are seeking foreign turnkey facilities, and the market for nuclear power reactors and associated technologies is projected to total $6-8 billion by the end of the decade and may climb to as much as $20-25 billion by 2010.

Several obstacles are hampering energy-sector expansion and many of these projects will not be complete or even begun before 2000. Indeed, China needs to annually add 19.3 million kilowatts of generating capacity between 1993 and 2000 to meet its goals, but added only 14.4 million in 1993. The shortfall is probably caused in large part by local-level officials diverting designated funding away from power projects to more profitable service-sector ventures, such as hotels and restaurants. According to Chinese press reports, only 11 percent of such funds were spent on energy-related planning or construction during the first five months of 1993; year-end figures are not available.

Perhaps equally damaging are two recent shifts in investment policy. According to Hong Kong press reports, the ruling State Council set the profit rate for foreign partners in joint-venture power plants at between 11 and 12 percent; municipal and provincial officials eager to alleviate electricity shortfalls had granted foreigners investment returns of up to 50 percent; recent reporting indicates that Beijing has backed off slightly on this policy, and will allow return rates of 15 percent. In addition, official statements during 1993 indicated that Beijing for the first time would allow total foreign ownership of power plants, but China's Minister of Electric Power recently told US officials that because of the industry's strategic importance China will retain a majority share in all investment and stock holding arrangements. The new rules may hamstring China's 7-year program to garner $25 billion in foreign investment--nearly one-half of China's own budget--for generating capacity and electricity transmission expansion by confirming many potential overseas investors apparent perception that China's electricity sector is too risky;

foreign firms over the past three years have signed more than 300 letters of intent to study investing in Chinese power plants, but less than 15 contracts have been finalized.

US Angle. US firms face multiple challenges in expanding their share of China's burgeoning electricity power and transmission equipment market. Government-backed financial aid and advanced technical skills will almost certainly enable Japanese firms to maintain their dominance of China's market for equipment--Japanese goods account for 65 percent of such imports, versus the United States' 15 percent share--despite a Chinese perception that Japanese firms engage in price-gouging on parts and after-sales service. Indeed, an emerging theme in China's entire infrastructure expansion program--including transportation and telecommunications--is that, despite the technological merits of a particular round of bids, the foreign firm offering the best concessionary terms will win. Guangzhou officials have publicly warned US businessmen that their inability to provide soft loans may disqualify them from that province's 20-year, $18 billion power generation expansion program.